AgeTech Products & Solutions:
A Way for Operators to Sort Through the Marketplace

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The Problem

Technology selection is complex.

The Issues

- A crowded marketplace of vendors & solutions leading to confusion.

- Limited technical expertise and awareness of agetech.

- Few operators have a strong, objective process for tech selection.

The Problem Restated

Deciding which technology innovations to pursue is complex.

Our Goal

To provide you a way to make those decisions easier.

Problems & the Tech Oracle

Finding New Tech Solutions

Together
We Care

The Result

- Lack of Problem Definition
- Impulsive Adoption
  - (exposure vs need)
- Fragmented Solutions
- Operational Inefficiencies
- Barriers to Data & AI
- Increased Cost
- Uneven Tech Literacy

The Solution

- Governing Process
  - Defines decision-making protocols, roles, and responsibilities.
  - Establishes policies and operational guidelines.

- Review Committee / Advisory Panel
  - Comprises experts or stakeholders providing guidance.
  - Offers recommendations, insights, and risk/opportunity assessments.

- Selection Methodology
  - Sets criteria and procedures for organizational choices.
  - Emphasizes objectivity, transparency, fairness & strategical alignment.

Frameworks Considered

- Baycrest BIO-LENS
  - https://prezi.com/view/G8ImlKa5ze9sbufJBxLq/

- Rogers' Diffusion of Innovations theory
  - https://elearningindustry.com/diffusion-of-innovations-everett-rogers

- CABHI's Innovation Adoption framework

Concept of Readiness Levels

- Readiness Levels
  - First pioneered by NASA in the 1970s as TRL's (T = Technology)
  - Designed to evaluate readiness of technologies for space exploration
  - Adapted for various industries

- Innovation Readiness Levels developed by KTH Royal Institute of Technology (Sweden)
  - Framework for guiding idea development for innovators and mentors
  - https://kthinnovationreadinesslevel.com

The Operator Perspective

- What problem are we trying to solve? How important is it?

- Is there a tech solution? Or many?

- Are we willing to pay for a solution? How much?

- Will our teams support implementing such a solution?

- Will this improve the Resident experience?

- Will this make the Team Member experience better?

3 Simple Concepts

1) **Dimensions of readiness**
   - Market (internal), Technology, Business, and Operational readiness

2) **eXperience assessment measures (eXams)**
   - Impact on Resident and Team Member experience

3) **Scoring scales**
   - 9 (optimal) to 1 (not started) for each Dimension
   - Positive / Neutral / Negative for each eXam

1) Dimensions of Readiness

MRL – Market readiness level
- Degree of internal market need.

TRL – Technology readiness level
- Development stage of solutions and vendors.

BRL – Business readiness level
- Strategic alignment and willingness to fund opportunities.

ORL – Operational readiness level
- Operational capability & capacity for implementation.

2) eXperience Assessment Measures

ResX – Resident eXperience
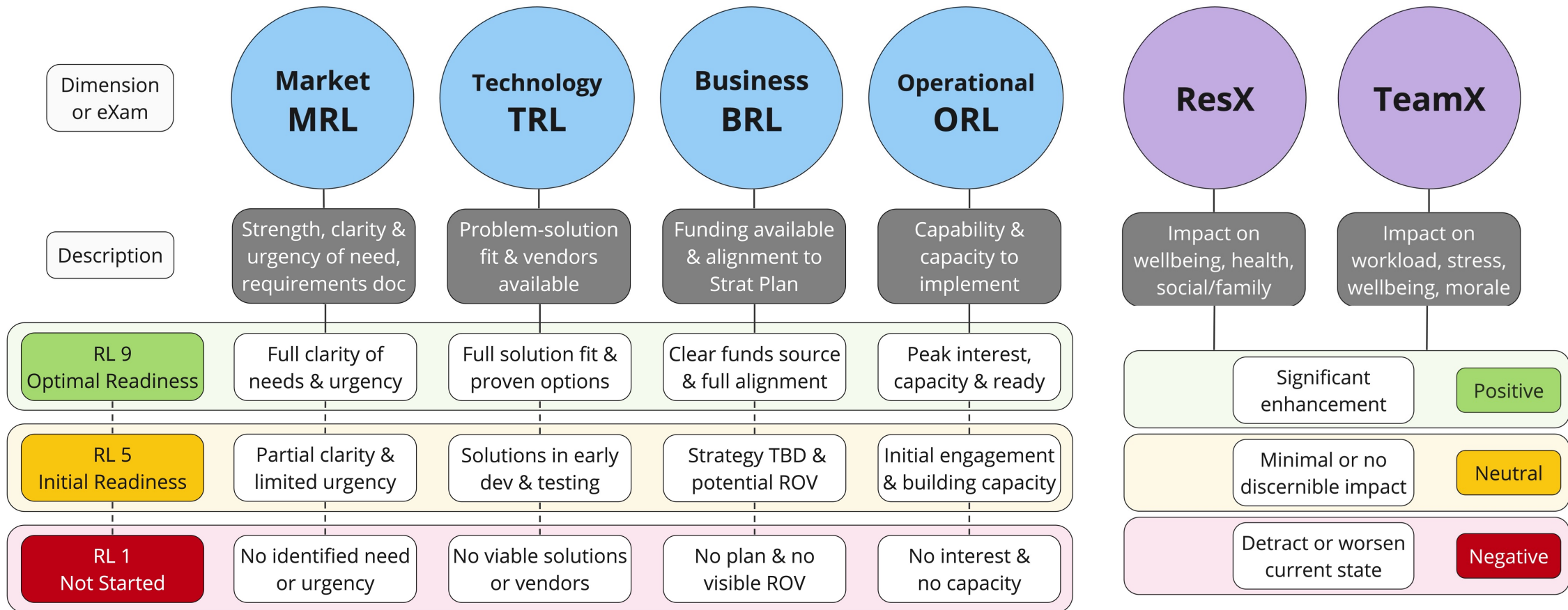
- Impact on residents' living or care experience.

TeamX – Team Member eXperience

- Impact on team members' work efficiency, satisfaction, and capacity to provide care.
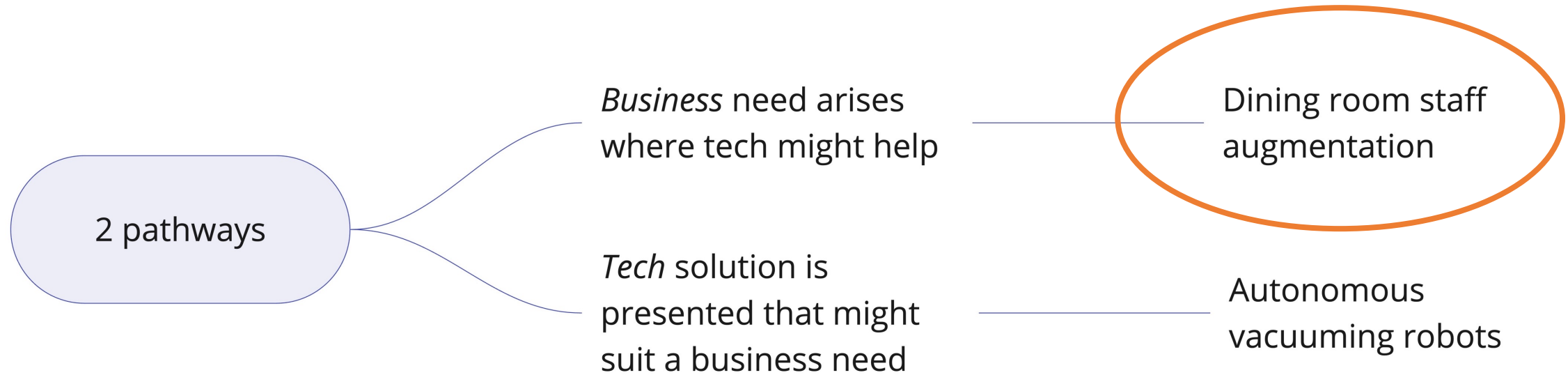
3) Scoring Scales

RL 9	Optimal Readiness	All aspects fully optimized; highest readiness achieved.
RL 8	Advanced Readiness	Close to optimal with minor improvements possible.
RL 7	Strong Readiness	Solid foundation with clear direction and strategy.
RL 6	Moderate Readiness	Moderate preparation with additional development needed.
RL 5	Initial Readiness	Preliminary plans in place; beginning of readiness journey.
RL 4	Early Development	Early stages of development with direction established.
RL 3	Conceptual Stage	Conceptual understanding with focus on defining potential.
RL 2	Preliminary Stage	Minimal progress towards readiness; early identification phase.
RL 1	Not Started	Starting point; no readiness efforts or progress made.

RLs

RL 9
RL 8
RL 7
RL 6
RL 5
RL 4
RL 3
RL 2
RL 1

eXams

Positive

Neutral

Negative

Summary

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Dimension or eXam	Market MRL	Technology TRL	Business BRL	Operational ORL	ResX	TeamX
Description	Strength, clarity & urgency of need, requirements doc	Problem-solution fit & vendors available	Funding available & alignment to Strat Plan	Capability & capacity to implement	Impact on wellbeing, health, social/family	Impact on workload, stress, wellbeing, morale
RL 9 Optimal Readiness	Full clarity of needs & urgency	Full solution fit & proven options	Clear funds source & full alignment	Peak interest, capacity & ready	Significant enhancement	Positive
RL 5 Initial Readiness	Partial clarity & limited urgency	Solutions in early dev & testing	Strategy TBD & potential ROV	Initial engagement & building capacity	Minimal or no discernible impact	Neutral
RL 1 Not Started	No identified need or urgency	No viable solutions or vendors	No plan & no visible ROV	No interest & no capacity	Detract or worsen current state	Negative

Application & Usage

2 pathways

Business need arises where tech might help

Dining room staff augmentation

Tech solution is presented that might suit a business need
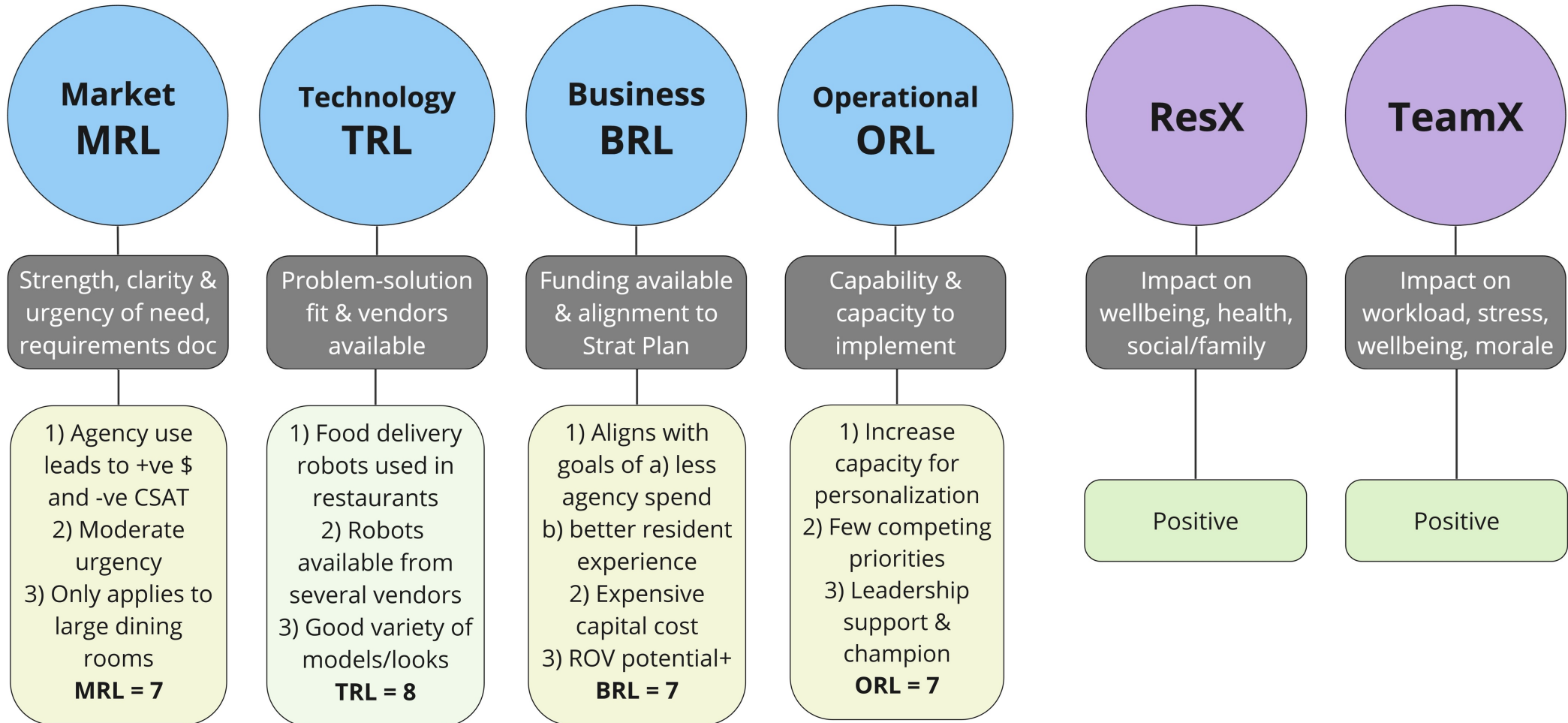
Autonomous vacuuming robots

Business Need Driven Example
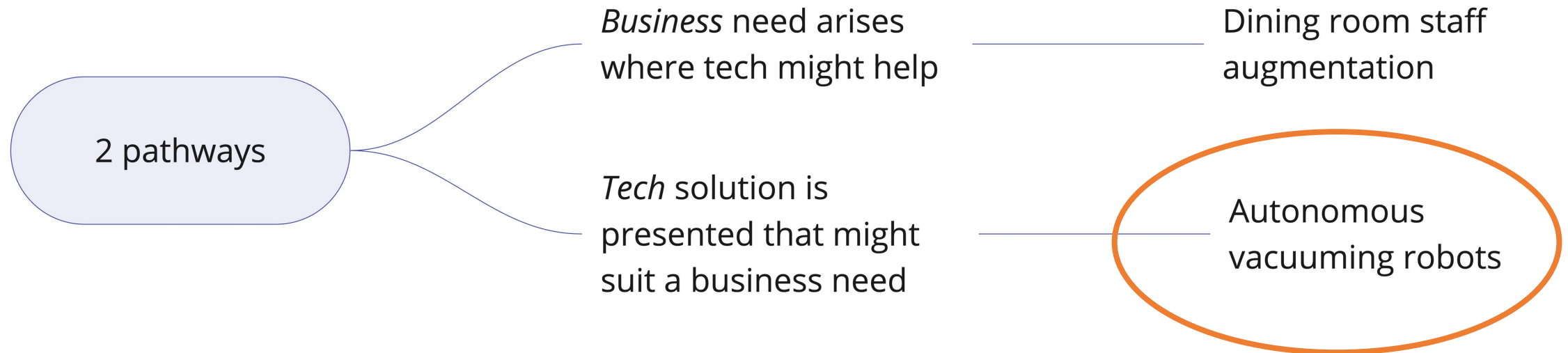
Dining room staff augmentation

- Need:
  - Chronic short staffing in larger dining rooms in retirement
  - Over-reliance on agency leads to increased cost and less personalized service
  - Improve resident satisfaction with meal temps
  - Increase resident engagement by team members

Application & Usage

2 pathways

Business need arises where tech might help

Dining room staff augmentation

Tech solution is presented that might suit a business need
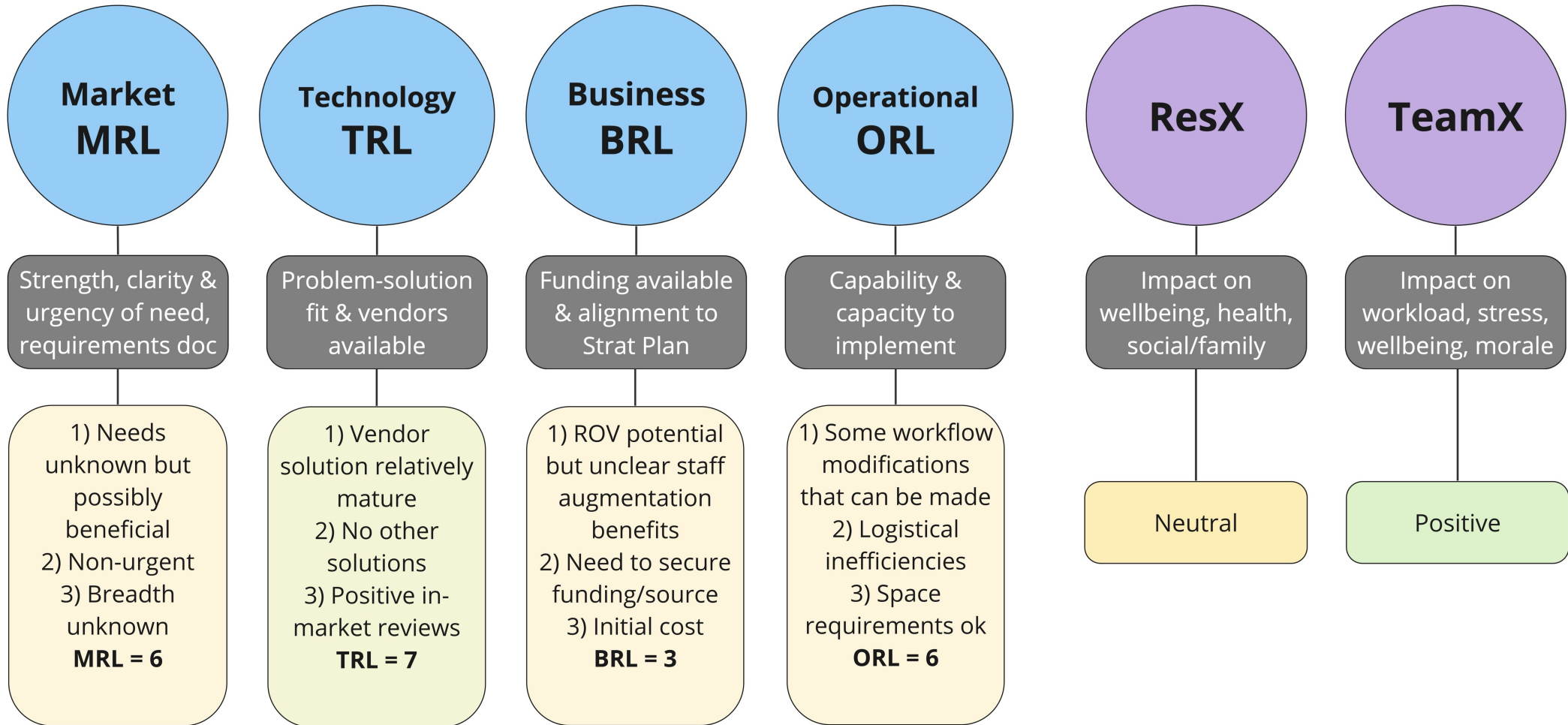
Autonomous vacuuming robots

Technology Driven Example

Autonomous vacuuming robots

- Suggested to us by our dining robot vendor ☺

- Need?
  - Staff augmentation, time savings, do other things?

Eg: Vacuuming robots

**Market
MRL**

Strength, clarity & urgency of need, requirements doc

1) Needs unknown but possibly beneficial
2) Non-urgent
3) Breadth unknown
MRL = 6

**Technology
TRL**

Problem-solution fit & vendors available

1) Vendor solution relatively mature
2) No other solutions
3) Positive in-market reviews
TRL = 7

**Business
BRL**

Funding available & alignment to Strat Plan

1) ROV potential but unclear staff augmentation benefits
2) Need to secure funding/source
3) Initial cost
BRL = 3

**Operational
ORL**

Capability & capacity to implement

1) Some workflow modifications that can be made
2) Logistical inefficiencies
3) Space requirements ok
ORL = 6

ResX

Impact on wellbeing, health, social/family

Neutral

TeamX

Impact on workload, stress, wellbeing, morale

Positive

Key Takeaways

- Lightweight process with 3 simple concepts

- Operator focused & adaptable to each operator's context

- Iterative – practice makes for consistency & better outcomes

- Broadly applicable & easy to start using right away

- Make it a program & part of the culture of innovation

Make it a Program

- Iterate every tech solution idea through this scoring framework

- Strike a group that will regularly review ideas and score them (rotate max every 2 years)

- Create a digital intake process to democratize input of ideas and source them from throughout the company (e.g. BrightIdea)

- Share results of reviews to create awareness and understanding

- Host a Dragons Den for top ideas & award prizes

Questions?

For more information on the content of this presentation please contact:

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Slides & Tools

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Idea Explorer AI

https://www.agetechlabs.ca/insights/tech-exploration-tools

https://bit.ly/ideaExplorer

Thank you for joining us!

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Appendix

Readiness Levels 9-7

Level	Name	Meaning	MRL	TRL	BRL	ORL	Concise General
	Concise description	Functional meaning	Clarity of needs & organizational alignment.	Problem-solution fit & availability of options.	Alignment to strategy, ROV, & secured funding.	Stakeholder engagement and operational capability for implementation.	Overall readiness and optimization state.
9	Optimal Readiness	Fully Defined & Optimal	Critical and urgent needs are fully understood and prioritized.	Comprehensive problem-solution fit with proven options available.	Full strategic and financial alignment, maximized ROV, & competitive advantage.	Stakeholder engagement is at its peak & exceptional readiness for deployment and adoption.	All aspects fully optimized; highest readiness achieved.
8	Advanced Readiness	Highly Defined	High clarity on needs & strong alignment to organizational goals.	Advanced solutions available with proven effectiveness & strong user feedback.	Business goals and strategies are highly aligned with a clear path to financial success.	High stakeholder buy-in & systems and processes well prepared for integration and use.	Close to optimal with minor improvements possible.
7	Strong Readiness	Well Defined	Clear, well-articulated needs with organizational alignment.	Good variety of solutions available & proven in initial settings.	Business strategy well-aligned & strong potential for ROV.	Stakeholder interest is strong, good organizational support & readiness for initial rollout.	Solid foundation with clear direction and strategy.

Readiness Levels 6-4

Level	Name	Meaning	MRL	TRL	BRL	ORL	Concise General
	Concise description	Functional meaning	Clarity of needs & organizational alignment.	Problem-solution fit & availability of options.	Alignment to strategy, ROV, & secured funding.	Stakeholder engagement and operational capability for implementation.	Overall readiness and optimization state.
6	Moderate Readiness	Moderately Defined	Moderate clarity on needs, with some organizational alignment.	Solutions are in development, showing promise but requiring further validation.	Business alignment in progress, moderate understanding of potential ROV & strategic fit.	Moderate stakeholder engagement, operational systems being adapted.	Moderate preparation with additional development needed.
5	Initial Readiness	Partially Defined	Partial clarity on needs with plans to further refine and address them, & limited organizational awareness.	Solutions are in early development & concepts being tested for feasibility.	Business strategy begins to take shape & focus on ROV potential.	Initial stakeholder engagement, building capacity.	Preliminary plans in place; beginning of readiness journey.
4	Early Development	Emerging	Emerging identification of needs with early signs of organizational awareness.	Emerging solutions & initial attempts at addressing the problem.	Business strategy emerging & early considerations of ROV potential.	Early stakeholder awareness, building interest & understanding potential impact.	Early stages of development with direction established.

Readiness Levels 3-1

Level	Name	Meaning	MRL	TRL	BRL	ORL	Concise General
Level	Concise description	Functional meaning	Clarity of needs & organizational alignment.	Problem-solution fit & availability of options.	Alignment to strategy, ROV, & secured funding.	Stakeholder engagement and operational capability for implementation.	Overall readiness and optimization state.
3	Conceptual Stage	Unclear	Conceptual understanding of needs & organizational awareness.	Solutions are conceptual & exploring viability.	Business strategy is unclear, with a focus on defining goals.	Stakeholder interest being gauged, clarify roles and potential engagement strategies.	Conceptual understanding with focus on defining potential.
2	Preliminary Stage	Minimal	Minimal awareness of needs, with very limited organizational focus.	Solutions are at idea stage, exploring problem.	Business strategy is in its infancy, with broad goals lacking detailed plans.	Operational readiness minimal, preliminary discussions on potential impacts & requirements.	Minimal progress towards readiness; early identification phase.
1	Not Started	Unidentified / None	No identified needs or organizational awareness.	No viable solutions or technology options available.	No business strategy or planning is in place.	No operational planning, stakeholder interest or capacity.	Starting point; no readiness efforts or progress made.

Impact Levels

Positive	Technologies that significantly enhance the living or care experience for residents, showing clear benefits in satisfaction and engagement.	Technologies that greatly improve work efficiency, satisfaction, and the capacity to provide care for team members, showing clear benefits in operational effectiveness.
Neutral	Technologies with minimal or no discernible impact on residents, potentially due to unclear benefits, inadequate implementation, or misalignment with resident needs.	Technologies with minimal or no discernible impact on team members, potentially due to unclear benefits, inadequate implementation, or misalignment with operational needs.
Negative	Technologies that detract from the living or care experience for residents, possibly worsening satisfaction or engagement due to poor fit, complexity, or user resistance.	Technologies that hinder work efficiency, increase frustration, or complicate care delivery for team members, likely due to poor usability, lack of integration, or added workload.

Digital Front Door: Features

- Online idea submissions portal
- Collaboration and refinement
- Evaluation & review
- Voting & community engagement
- Pipeline tracking & measurement
- From ideas to implementation

Sample solutions
- BrightIdea's [Idea Box](#)
- [Ideanote](#)

Supporting Links

- NASA TRLs - https://www.nasa.gov/directorates/somd/space-communications-navigation-program/technology-readiness-levels/

- KTH Innovation Readiness Level - https://kthinnovationreadinesslevel.com

- Alberta Innovates / Health Tech Commercialization - https://albertainnovates.ca/health-tech-commercialization-supports/

- BrightIdea Idea Box - https://www.brightidea.com/product/ideabox/

- Ideanote - https://ideanote.io

- AgeTech Labs - https://www.agetechlabs.ca